ABJ80, TRB Standing Committee on Statistical Methods
Tuesday, Jan 10, 2017
10:15-noon, Marquis Ballroom Salon 10 (M2) Marriott Marquis
Meeting Minutes

Chair: Linda Ng Boyle, University of Washington
Secretary: Bob Scopatz, VHB

Scope: The ABJ80 Committee is concerned with the appropriate application of statistical methods in the field of transportation. The committee serves as a resource on statistical matters for all TRB committees and related committees for the National Academies; fosters understanding and use of statistics through dissemination of educational activities; and identifies and fosters research needed in statistics within the transportation community.

ATTENDEES:
Members: Linda Boyle, (Chair), Bob Scopatz, (Secretary), Jonathan Agüero Valverde, Panagiotis Anastasopoulos, Gary Davis, Eustace Deogratias, Birsen Donmez, Naveen Eluru, Carol Flannagan, Feng Guo, Md Mazharul Haque, Karl Kim, Kara Kockelman, Bo Lan, Gord Lovegrove, John Milton, Jenny Guarino, Peter Savolainen, Danny Xiao

Friends: Amir Pooyau Afghari, Chandra Bhat, Lei Bu, Chou-Lin Chen, Andrew Ceifetz, Bahar Dadashova, Hajar Dadashova, Kate Deutsch-Bergner, Sean Diehl, Venkata Duddu, Lee Fawcett, Grigorior Fountas, Nadia Gkritza, Joe Grother, Bachir Hamadett, John Handley, Kevin Hathaway, Liberty Hoekstra-Atwood, Xiao Hyang, Soheila Khoii, Rick Kreider, John Lee, Chenhui Liu, Pan Lu, Mehdi Nassirpour, Francda Russo, Xiaohua Luo, Joe Matthews, Ross McCarthy, Eun Sug Park, Seri Park, Erika Miller, RJ Porter, Mahdi Rajabi, Hui Ren, Xiao Qin, Tariq Usman Saeed, Anuj Sharma, Mohammad Razaur Shaon, Joy Sharp, Ruihua Tao, Neil Thorpe, Billy Williams, Jonathan Wood, Ken Wu, Xiaoyu Zhu

Note: the slides presented at the 2018 ABJ80 meeting are available on the ABJ80 website:
http://trbstats.weebly.com/

Introductions
Linda Ng Boyle opened the meeting at 10:15 AM. Attendees introduced themselves.

Meeting Minutes (*Bob Scopatz*)
- The group reviewed the meeting minutes in advance; Linda circulated the 2015 meeting minutes via email.
- *Gary Davis* moved to approve, *John Milton* seconded, and all in favor to approve.

Update on Committee Rotation Requirements and Membership
Linda discussed meeting rotation and what TRB strives for in terms of diversity. This year, 1/3 of the committee must rotate and the updated roster must be submitted by January 31, 2017. The goal is to have 25 main members (including chair), 5 non-US, 2 State DOT, and 4 young members. Members who have been on the committee for 9 years *must* rotate off; 6 have to be rotated this year.

Membership consideration: seeking people who are committed to being active in the committee. We are interested in multiple disciplines. ABJ80 was originally focused on safety, but the committee gets papers from many areas and has evolved to welcome those with an emphasis on analytical methods from different transportation areas.

Attendance and participation is important. Every member should be able to do paper reviews and be active in other subcommittees. Would also be great for members to help with special sessions/workshops. 2017 TRB Activities sponsored by ABJ80 were included in the slide presentation.

Workshops and Sessions Sponsored and Co-Sponsored by ABJ80 for 2017
Linda presented the workshops and sessions that the committee is sponsoring (or co-sponsoring) this year.
- *Peter Savolainen* presented on the Doctoral Student Research session he moderated this year.
- Linda described the Spatial Analysis workshop, which included 40 attendees. *Jonathan Aguero-Valverde* described the session and outcomes. Our goal is to use the dataset from this workshop or a data contest; *Yiyi Wang* will work on this. *Kara Kockelman* spoke on her team's analyses. Slides from workshop will be posted on the committee website.

TRB Data Contest for 2018 *(Linda Boyle, Naveen Eluru)*
- There was no TRB data contest this year. Linda showed a slide of what is needed to successful set up a TRB data contest, including the development of a good research question, having a "call center", and deadlines for posting the data. For 2018 we have a dataset of pedestrian crashes.
- Submissions are limited to 6 pages and need to follow a specific structure. They should be submitted by November 30th, with reviewers needed during the Thanksgiving/Winter break period.
- Multiple awards are considered (best student, best professor, best industry submission, etc.)

Paper review process, statistics, and identification of issues *(Panos Anastasopoulos, Linda Boyle)*
- *Panos'* gave a presentation on the paper review process for this year (slides will be available on trbstats.weebly.com). Linda noted that we review papers for other committees as part of ABJ80's mission.
- *Linda* asked that if you are an ABJ80 member, please do NOT reject a paper review request. We do try to match to specific application areas, but our goal is focused on a rigorous statistical review, so if possible, please consider reviewing given your statistical expertise. It is often difficult to get sufficient reviewers for each paper.
- Please keep your profile updated so we can know what your interest areas.

Discussion of Best Paper Award Process and Qualifications (*Peter Savolainen*)
- Each year, the best paper award subcommittee reviews 4-5 candidates for the award, which gets announced a year later.
- The winners for the 2016 Best Paper Award are: Shansunna Yasmin, Naveen Eluru, Jaeyoung Lee and Mohamed A. Abdel-Aty for *An Ordered Fractional Split Approach for Aggregate Injury Severity Modeling.*
- Certificates were handed out and a picture was taken.

Social Media (*Mazharul Haque [Shimul])*
ABJ80 has a website, LinkedIn and Twitter accounts. The TRB website is: http://trbstats.weebly.com. *Shimul* gave a presentation on the website, which has been updated to include link to a Google Scholar profile for members that have one. If members would prefer a different link (e.g, research gate, academic.edu), please inform Shimul. Linda added that we want to give the community information about ABJ80 members, which can also help other committees when seeking reviewers.

TRB Circular on Analytical Tools for Transportation Researchers and Practitioners (*Linda Boyle*)
- Linda thanked everyone who worked on the circular and presented a presentation of the contributors and the topic areas for each chapter.

- Circular is based past workshops sponsored by ABJ80 and to ensure that all authors/presenters will be appropriately credited.
- The draft is 80-90% complete.

TRB initiatives and Data Section News (*Bernardo Kleiner*)
- *Bernardo Kleiner* thanked everyone involved in paper reviews.
- TRB is not just a research organization and not just a transportation organization. TRB's role is to bring stakeholders together so that research informs practice and practice informs research. Bernardo encouraged us to be visionary with respect to the role of statistical methods in informing practice, and to consider ways to communicate and engage others.
- There were over 5,800 papers this year, and attendance is up as well (may exceed 14,000). For 2017, a hybrid approach is tested with a small number of posters. This was slotted as a podium session, but ABJ80 used it well as a Doctoral Research session.

Future Committee Activities/Sessions (Linda Boyle)
Proposed sessions on dealing with small sessions, quantifying risks associated with vehicle automation, and data fusion—how to work with disparate datasets.
Linda asked the attendees for additional ideas. The discussion included:
- *Gord Lovegrove* said he was interested in a data fusion workshop. *Carol Flannagan*, and *Jonathan Wood* was interested in helping with this workshop. *Chandra Bhat* noted that a planning group is needed for this.
- *Mehdi Nassirpour* emphasized a need to focus on the statistical side of applications. He suggested that vehicle automation might be an example as it is a hot topic now.
- *Anuj Sharma* said that Uber shared some aggregated data. *Carol Flannagan* said that this might be better as a podium session. There are statistical issues given that certain events are extremely rare. Perhaps this should be tabled for now, but it is important.
- *Chandra Bhat* said that vehicle automation and prediction of trajectories are very closely related.
- *Naveen* suggested that freight might be a good case study.
- *Feng Guo* suggested that we look at the time intervals between events for survival analysis. *Linda* noted data is often assumed to be of equal time intervals; that may not necessarily be appropriate.
- A question came up on whether ABJ80 would consider doing a workshop on the circular? *Mehdi Nassirpour* suggested that we could use the hybrid poster/podium format for this.

Transportation Statistics Interest Group of the American Statistical Association (Feng Guo)
- *Feng Guo* handed out the TSIG purpose and its activities for 2016 and 2017. They have 300 members. You do not need to be an ASA member to join the TSIG.
- Session topics for JSM are due 1/11/2017. Abstracts for individual presentations are due Feb 1, 2017.
- He asked if the ABJ80 mid-year meeting could be held at the ASA Joint Statistical Meeting. Last year the TSIG sponsored six sessions.
- There is a website for the TSIG of ASA: http://www.amstat.org/sections/tsig/Welcome.html and you can sign up for email updates from the TSIG.
- *Mehdi Nassirpour* noted concerns with the time slot at JSM as it limited the number of people attending to around 10.
- *Feng Guo* talked about the one-week summer program (Aug 14-18, Duke University) funded by NSF mathematical institute (acronym is SAMSI). Topics included improving safety and statistical methodologies that include causal information; extension of SPFs and CMFS; risk analysis for autonomous vehicles; Bayesian models. They are looking for speakers and interested attendees. The general website is: https://www.samsi.info/programs-and-activities/research-workshops/

Picture taking! The group pictures were taken and emailed to Linda.

Call to Audience/relevant activities of other committees, conferences, etc.
- Traffic Records Forum has moved to late July/early August every year. The 2017 Forum will be in New Orleans August 6-9 this year.
- RJ Porter: There will be an "alternate statistical methods for transportation research" presentation Thursday morning.

Linda adjourned the meeting at 11:20 AM